

Student Attitudes and Perceptions of Using Facebook for Language Learning

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Abstract

This research provides insight into Japanese students' perceptions and attitudes of participating in activities through Facebook for language learning. In addition, the authors discuss the overall implications of and potential uses for Facebook in the field of second language learning and teaching. Ninety-seven students from three private universities in Japan participated in this study. A 26-item quantitative questionnaire using a 7-point Likert scale and an open-ended qualitative questionnaire were used in this study. The results showed a small increase in positive attitudes toward most activities for language learning following the completion of the study compared to prior perceptions, but there were mixed attitudes toward using Facebook in an educational environment.

Web 2.0 technologies and social networking sites (SNS) like Facebook have been widely adopted around the world, led by young adults who populate SNS by constructing their virtual lives and forming social relationships daily (Bumgarner, 2007; Lenhart & Madden, 2007; Selwyn, 2007; Stutzman, 2006; Yu, Tian, Vogel, & Chi-Wai Kwok, 2010). The proliferating use of SNS by young adults has not only brought an increased demand for incorporating them into educational endeavors and calls for updated pedagogies, but also significant changes in student learning styles (Lockyer & Patterson, 2008; Mazman & Usluel, 2010; McLoughlin & Lee, 2007; Munoz & Towner, 2009; Omar, Embi, & Yunus, 2012; Selwyn, 2007).

Facebook and other Web 2.0 technologies are powerful digital tools that have a real potential to positively affect student learning (Cook et al., 2008), especially in second language (L2) learning where students are encouraged to become active participants in a learning community (Alm, 2006). In fact, the application of SNS and other Web 2.0 technologies into L2 education has been shown to improve students' overall interest in language learning (Buzzetto-More, 2012; Jones & Shao, 2011; Liou & Peng, 2009; Pinkman, 2005; Shih, 2011; Wang & Vasquez, 2012). The positive outcomes from the previous research conducted have led more language teachers to begin exploring new ways to utilize SNS like Facebook to improve their own teaching methods in order to advance student language learning (Lockyer & Patterson, 2008; Nakatsukasa, 2009).

Facebook was established in 2004 and has grown exponentially to become not only the most popular SNS in the world (Mazman & Usluel, 2010), but also the most prominent social-networking tool of the past decade for students' online learning (Omar, Embi, & Yunus, 2012). According to Facebook, there are over one billion users worldwide (Facebook, 2012) and almost 80% of those users are from outside the United States and Canada (Facebook, 2012). Among the rankings by country, Japan—the location where this study takes place—ranks sixteenth in the world for the total number of Facebook users and fifth among Asian countries.

In this study, the authors looked to advance the knowledge of Web 2.0 technologies for foreign language teaching and learning. The overall goal was to determine whether educators could provide a more rewarding learning experience for their students by incorporating Facebook into regular L2 teaching and learning environments by analyzing student opinions and attitudes. The first objective was to reinforce previous evidence of Facebook's potential in an educational context. The second objective was to help educators identify which specific pedagogical activities used through Facebook are most likely to be well received by students, an area of research that features minimal (no?) publications to date.

Background

Social constructivism and its related theories focus on individual learning that occurs in response to engaging in group interaction. The origins of these theories are generally attributed to the Russian psychologist Lev Vygotsky. According to Vygotsky (1978), language is a tool external to the self and used for social interaction, and the learner actively constructs knowledge via these interactions rather than through passively receiving information. Knowledge is at first constructed collaboratively with others in a social context and then acquired by individuals (Von Glaserfeld, 1990). Through collaborative elaboration, learning takes place in meaningful contexts in negotiation and collaboration with others (Bruner, 1999). It is suggested here that SNS technology supports these collaborative contexts for learning more opportunely than ever before. Traditional educational models focused on one-way passive transfers of information from educators to students in the form of lectures and textbooks; social applications provide a flexible space for personalization of learning and increased communication between teachers and students. Additionally, students can participate with each other communicatively and collaboratively in the context of extended interactions and activities that are unrestricted by time and place.

Social constructivist theories combined with an increasing influence of technology in education have promoted the emergence of a new area of research known as computer-supported collaborative learning, which is based on learners sharing in the construction of knowledge using technology as the main avenue of communication. This new discipline focuses on collaborative learning and inherently draws upon theories that emphasize group interaction and co-construction of knowledge such as constructivism, social learning theory, cooperative learning theory, and more recently collaboration theory (Hmelo-Silver, 2006). The rapid development of social media has heightened the interest of researchers from various disciplines looking to understand social software and its impact on learning.

Facebook's Influence in L2 Learning Contexts

Although early studies of Facebook focused mainly on its inclusion in a first language (L1) educational environment, some research has investigated how Facebook can be utilized in L2 learning. Numerous studies on Facebook's inclusion in L2 education environments have reported positive influences on student motivation, engagement, and attitudes. Among the studies conducted, Facebook has been shown to have an impact on motivation among students in higher education (Bugeja, 2006; Lampe, Ellison & Steinfield, 2008; Mazer, Murphy, & Simonds, 2007; McCarthy, 2012; O'Sullivan, Hunt, & Lippert, 2004; Promnitz-Hayashi, 2011; Suthiwartnarueng & Wasanasomsithi (2012); Terantino & Graf, 2011; Yunus & Salehi, 2012; Ziegler, 2007). Most notably, Mazer et al. (2007) suggest that student motivation and participation are greatly enhanced when engaging course material is presented through more personalized platforms, something Facebook and other SNS provide. Similarly, Ziegler (2007) contends that Facebook has the "capacity to better motivate students as engaged learners rather than learners who are primarily passive observers of the educational process" (p. 69). Yunus and Salehi's (2012) study also revealed similar conclusions that coincide with the claims made by Mazer et al. and Ziegler regarding the perceived value of language learning through Facebook. Yunus and Salehi postulate that students felt their motivation and confidence improved through participating in activities within Facebook. Specifically, the majority of students reported that instant interaction and feedback increased motivation, while informal interactions such as when fellow students *liked* comments helped improve their confidence. Findings from the studies above indicate that Facebook's integration into education has had positive effects on student motivation.

Equally important as motivation, sustaining students' engagement often depends on good instruction, timely delivery of quality materials, and most importantly general student satisfaction. Therefore, a number of studies collectively assert that the inclusion of Facebook along with other Web 2.0 technologies enhance student satisfaction and investment, especially among L2 learners (Blattner & Fiori, 2009; Harwood & Blackstone, 2012; Kabilan, Ahmad, & Abidin, 2010; Li & Pitts, 2009; Mills, 2009; Shih, 2011; Wang & Vasquez, 2012; Yunus & Salehi, 2012). Yunus and Salehi's 2012 study parallels most closely to the present research, but dealt only with writing outcomes. They investigated students' perceptions of using Facebook groups for improving students' writing skills, as they engaged in various writing tasks like brainstorming and summarizing. The authors reported positive student attitudes toward Facebook's group application to help improve their writing outcomes. More specifically in their study, Yunus and Salehi highlighted student frustration at the perceived lack of authentic learning available to them in a traditional L2 classroom setting. They found that Facebook's group application can provide such authenticity, especially an environment in which students feel confident enough to use and improve their L2 skills.

In a similar study, Shih (2011) supported Yunus and Salehi's findings by claiming that the use of Facebook for peer-to-peer assessment, a process where learners evaluate their peers' work based on teacher-developed benchmarks, resulted in increased student interest and engagement during study, especially with regard to

writing. Furthermore, Kabilan et al. (2010) reported that students believe their language skills increased through using Facebook, and further, their motivation, confidence, and attitude concerning language learning were also enhanced through their experiences. Taken collectively, these studies indicate that when Facebook is utilized effectively, it can help build student confidence, which in turn enhances student engagement and satisfaction in language learning.

Additionally, several studies have examined how students generally perceive Facebook for language learning or how Facebook's integration into traditional L2 learning environments has affected or changed student attitudes toward it (Akbari, Eghtesad, & Simmons, 2012; Eren, 2012; Hiew, 2012; Suthiwartnarueput & Wasanasomsithi, 2012). Collectively, the researchers reported an increase in positive student attitudes toward using Facebook. Specifically, Akbari et al. and Suthiwartnarueput and Wasanasomsithi reported that students considered Facebook a relevant and purposeful educational tool for language learning. Similarly, Eren's study examined student attitudes based on six variables including Facebook's use in education and improving language skills. Both studies reported overall positive attitudes in all categories.

However, there are apparent limitations in each of these studies. Specifically, although Hiew (2012) focuses on student perceptions on all aspects of language learning through Facebook, the study only focused on the data from written discourse drawn from student journals while Suthiwartnarueput and Wasanasomsithi's study only explored Facebook's impact on individual academic skills (i.e., grammar), also through writing activities only. Meanwhile, Eren's (2012) and Akbari, Eghtesad, and Simmons' (2012) studies have limitations in regard to small participant sample sizes, 48 students and 20 students respectively. However, Eren's study is of particular interest. The researcher looked at Turkish university students' perceptions of using Facebook for language learning and to improve language skills, as they were concerned that most English language teaching is classroom-based and there are few opportunities to use English outside of class. Results indicated that students overall had positive attitudes toward Facebook for educational purposes as well as for improving language skills. However, which language skills students perceived to have benefited the most is not made clear in the study and, as acknowledged by the author, the limited number of participants stands as an important limitation, and therefore, claims made in the study are not generalizable to the attitudes of most L2 learners.

These studies support the advantages of utilizing Facebook for language learning. Since a number of studies have already reported on Facebook's positive impact on student motivation, satisfaction, and investment, the present study looked to further support this body of research by exploring the perceptions and attitudes of students regarding Facebook and L2 learning. In recent years, L2 teachers have been faced with conflicting information regarding the appropriateness and effectiveness of Facebook's educational potential and need support for any decision they may make in the classroom. With a focus on learner needs and interests, this study was designed to discover how L2 learners perceived the usefulness of specific pedagogical activities conducted on Facebook. Based on the notion that teachers using Facebook as a language learning tool need to have more information about what activities work best in the classroom, the research questions that guided this study are:

1. What are L2 learners' opinions toward the general ease of using Facebook in an educational context?
2. What are L2 learners' attitudes toward the usefulness of Facebook for engaging in specific activities for language learning?

Methods

Participants

The researchers recruited undergraduate students from three private universities in the Kansai region of Japan on a voluntary basis. Initial data were collected from 109 students. Data from 12 participants were removed due to inconsistent responses or failing to complete all sections of the questionnaire. As a result, 97 participants remained – 50 male and 47 female students who were about to complete their first year of university study. The majority of the students were 18 years old at the time of this study. At the time of the study, all participants had Test of English as a Foreign Language (TOEFL) scores ranging from 210 to 490, and would be considered beginner to intermediate learners of English. Additionally, participating students came from several different departments including 12 English majors, 18 business majors, 18 economics majors, and 49 sociology majors.

Finally, as a prerequisite for being selected to participate in the study, all potential students were required to have a Facebook account and prior experience using it. In order to give the researchers a general understanding of the participants' ability to use Facebook, participants were asked via the questionnaire (See Appendix A) to identify their experience using Facebook based on how many years they have used it and how often they access it.

The vast majority of the participants could be categorized as novice or beginner Facebook users. Ninety-five percent ($n = 92$) of respondents had been using Facebook for fewer than two years. The remaining students ($n = 5$) had been using Facebook between three to five years. Participants reported using Facebook on a weekly basis. Forty-three percent of the participants ($n = 42$) reported accessing Facebook one to three times a week while 26% ($n = 25$) reported accessing it four to six times a week. The remainder ($n = 30$) reported accessing it seven or more times per week. Regarding daily use, an overwhelming majority (84%) accessed Facebook zero to three times a day compared to a much smaller group (11%) who accessed it four to six times a day. The rest of the participants (5%) reported accessing it seven or more times a day.

Instruments

A mixed method approach was used for this study to investigate the attitudes and perceptions of Japanese university students' use of Facebook in an educational setting, including its capacity to be used in a way similar to a traditional learning management system as well as for various specific language-learning activities. The 26-statement quantitative questionnaire included both statement-type and question-type items and was divided into three sections. Sections One and Two each consisted of 10 statements. Section One examined the respondents' opinions of using Facebook for general educational purposes, while Section Two focused on the

participants' opinions of the applicability of Facebook's group function for conducting specific activities for language learning.

In Section One the first two statements asked students to rate Facebook's potential to function both socially and educationally, while statements three and four asked participants to compare Facebook's mobile accessibility and capacity to deliver official school-related information with their own university websites. The remaining questionnaire items referred to Facebook's suitability as a learning management system. All statements in Section Two asked students to evaluate the effectiveness of using Facebook's group function to deliver a range of activities for language learning covering all four skill sets in addition to other related tasks like note-taking and peer-editing. Section Three contained six demographic and personal questions that asked for students' gender, year level, university type (public or private), and general use of Facebook, including how long they have been using it and how often, on average, they accessed it. Response choices for all three sections were scored from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*) on a Likert scale. Data scored as 4 were considered *neutral* by the researchers. Initially, the researchers chose a 7-point scale to encourage more reliable and varying opinions and to limit responses from being too neutral. Then, for ease of presentation, the results from the questionnaire were collapsed into a three-point scale. For example, data scored from the Disagree side of the Likert Scale, from 1 to 3, were merged and labeled as *Disagree* while data scored from the Agree side of the Likert Scale, 5 to 7, were merged and labeled as *Agree*. Data scored as 4 were labeled as *Neutral*.

An initial questionnaire was created after reviewing relevant literature based on Fowler's (2002) principles of reliability: use of English lexicon, clarity of wording, absence of biased words and phrases, item formatting, standardized response expectations, and clarity of instruction. A voluntary group of 10 university English major students then assessed the questionnaire for clarity. This version of the questionnaire was then amended based on their feedback. Two Japanese university professors of English then translated the updated questionnaire from English to Japanese and then reverse translated it to ensure content validity. After further piloting by two independent volunteer groups of 25 Japanese university students, additional modifications were made to both sets of Questionnaire instructions, including word choice and item statements to ensure a comprehensible and reliable questionnaire and to minimize any language-related misinterpretations. The final version of the questionnaire was distributed in Japanese including all directions, statement items, and rating scales. Upon collection of both the pre- and post-test data, a subsequent paper-based, open-ended written-response questionnaire was created and distributed to better ascertain, through qualitative comments, the students' reasons for possible changes in opinions toward Facebook's educational reliability and attitudes concerning the effectiveness of activities conducted within for language learning purposes. Questions topics mirrored those on the quantitative questionnaire; personal information, questions about general issues regarding using Facebook for educational purposes, and questions asking about student opinions about specific Facebook activities they took part in. (See Appendix A.)

Procedure

In October 2012, the start of the second semester in the Japanese academic year, the researchers administered the questionnaire to all participants. They were asked to complete the paper-based questionnaire outside of class within a week so that they could take their time answering each question honestly and competently. Students were also informed that all questionnaire responses were anonymous. For Section Two, students were asked to provide responses based on initial reaction on whether each activity could be successful or useful if conducted through Facebook, because some students may have had little or no experience with the activities at this point of the research.

The research was carried out over 10 weeks of classes. Classes met once a week for 90 minutes, but Facebook-related activities were limited to less than 25 minutes per class session, adding to slightly more than four hours of class time. However, the subjects also participated in Facebook activities outside of class and this time could not be precisely measured. Tasks mirrored the questions on Section Two of the quantitative survey. These tasks included posting videos, links, and writing and reacting to posts by other students and teachers, interacting with foreign *guest speakers*, editing others' written work posted online, and interacting with the instructor through the Facebook messaging system.

In mid-December 2012, the identical paper-based questionnaire was administered in the same manner as the initial questionnaire. The statements were slightly modified to the past tense because the research was in its concluding phrase. Upon compiling data from both the pre- and post-questionnaires, participating students were given a paper-based, open-ended, written-response questionnaire. Given the timing of the school term and the extensive nature of the question items contained within this questionnaire, students were asked to complete their answers over the two-week winter break. Additionally, to encourage thoughtful responses, students were given the option to submit their answers in Japanese, English, or a combination of both.

Data Analysis

Descriptive analyses of the quantitative data were conducted using SPSS version 21.0 (SPSS, 2012). In order to analyze the qualitative data, the researchers used a content analysis approach. The main analytical step in content analysis was the coding of narratives based on emerging themes, trends, patterns, or conceptual categories (Strauss & Corbin, 1990). Data were initially sorted and coded into 15 themes. Once initial themes were identified, the researchers then reevaluated and refined the entire body of data by regrouping related themes and finally combined categories to compile a new list of five general themes. As with most content analyses, a small portion of the content remained uncategorized due to either vagueness or lack of relevance. As such, a number of the original contributions fell into the category of *other*, which included undecided and face-to-face communication is good. Differences in opinion between the two researchers were resolved through discussion.

Results

First, a reliability analysis was used to investigate the internal consistency reliability among the 20 statement items within the questionnaire. The reliability estimate for Section 1 (10 items) had a Cronbach Alpha value of .82 while Section 2 (10 items) had a Cronbach Alpha of .89, both signifying a high degree of consistency among the 20 items.

Next, an exploratory factor analysis procedure was used on the pre-test to reduce the data and identify any groupings being measured among the statement items. For statement items 1-10, the factor analysis identified a three-factor solution. The first factor, *Ease of Use*, comprised statement items 1-3 while the second factor, *Educational Use*, contained items 4-6. The final factor, *Instructional Use*, contained items 8-10. For both the pre- and post-test descriptive statistics, the combined averages of the statement items within each category are presented as frequency distributions. As Table 1 shows, based on descriptive statistics there were no major changes identified in participant opinions following the completion of the study.

Table 1

Means and standard deviations of each factor in Section 1.

	Pre-test		Posttest	
	M	SD	M	SD
Ease of use	4.74	.86	4.77	1.13
Educational use	4.47	1.00	4.60	1.00
Instructional use	4.87	1.05	4.60	1.27

With regard to the first research question, learners' attitudes toward using Facebook in education, Table 2 shows the frequency data of the participants' opinions for each of the three factors for both pre- and posttest.

Table 2

Frequency of Responses for each of the Three Factors for Section 1.

		Pre-test			Posttest		
		Disagree (%)	Neutral (%)	Agree (%)	Disagree (%)	Neutral (%)	Agree (%)
<i>Ease of Use</i>							
S1	Facebook can be used both socially and for educational purposes.	7	22	71	13	24	63

S2	Facebook is safe to use both socially and for educational purposes.	21	26	54	20	27	54
S3	Facebook is easier to access from my mobile phone than my own university's website.	7	16	76	18	25	58
S4	Facebook is easier to find school-related information than my own university website.	7	31	62	19	24	58

Educational Use

S5	It's easy to make posts, upload pictures and videos on Facebook.	9	16	74	14	18	68
S6	Facebook is a good place to keep in contact with other students from class.	15	28	57	21	31	48
S7	Facebook is a good place to contact my teacher outside of class.	18	37	45	16	25	59

Instructional Use

S8	Facebook is a good place to check class notes or homework assignments posted by the teacher.	13	40	46	10	21	69
S9	Facebook is a good place to ask for help about homework assignments.	19	42	39	20	27	54
S10	Facebook is a good place to check for school-related updates and notices.	10	40	49	18	35	47

For Ease of Use, the results showed that participants overall responded favorably to all statement items on both the pre- and posttest. Although, it should be pointed out that although general opinions regarding Facebook's ease of use were all positive in the posttest, participant perceptions either remained the same or decreased slightly from the pre-test. However, most importantly, the majority of participants (63%) felt that Facebook could be used both socially and educationally. Similarly, 58% of the participants' felt that Facebook was easier to use than their own university websites in order to access school-related information. Identical participant responses also favored Facebook, compared to university websites, when accessing content via mobile phones. Positive participant beliefs shown here toward Facebook's usability suggest that there were few difficulties or limitations experienced by the participants that might limit their learning potential.

Regarding Facebook's Educational Use, results showed that participants had mixed opinions. Overall, majority responses were positive at both pre- and posttest, but attitudes decreased slightly at posttest for two of the three corresponding items concerning the educational use of Facebook. In particular, participants had contrasting perceptions toward Facebook's learning potential between student-teacher and student-student interactions. On the other hand, the highest rate of participant responses, using Facebook for posting content (68%), indicated that Facebook's unique platform and functionality is ideal for educational pursuits, which seems to correspond with participant attitudes toward Facebook's general ease of use.

Concerning the Instructional Use of Facebook, results indicated that at pre-test participants' responses were only moderately positive, leaning more toward neutral, but in fact, showed some of the largest changes in perceptions at posttest. Moreover, the largest increases in observations reported at posttest related to the participants' ability to access information or communicate through Facebook for specific learning purposes, for example, in order to complete homework assignments.

As shown in Table 3, which refers to the second research question about L2 learners' attitudes toward the usefulness of Facebook for engaging in specific activities for language learning, statement items 11-20 were also categorized into three distinct factors. The Interpersonal Communication factor statements included items 11, 16, 18, and 20 while the Interpretive Communication factor statements consisted of items 13-15 and 19. The final factor, Presentational Communication statements were comprised of the remaining items 12 and 17. The descriptive statistical analysis for each group's pre- and post-test data again did not reveal any major changes in student attitudes based on the average scores presented in Table 3.

Table 3

Means and standard deviations for each statement type of each factor in Section 2.

	Pre-test		Posttest	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Interpersonal	4.58	.80	4.58	1.14
Interpretative	4.46	.88	4.54	1.20
Presentational	4.35	1.04	4.32	1.27

Turning to student attitudes toward activities and tasks afforded through Facebook, Table 4 shows overall that initial participant beliefs were generally positive for 8 of the 10 statement items in the pre-test. In comparison, the majority of participants responded positively to all statement items in the posttest.

Table 4

Frequency of Responses for each item of the Three Factors for Section 2.

	<i>Interpersonal Communication</i>	Pre-test			Posttest		
		Disagree (%)	Neutral (%)	Agree (%)	Disagree (%)	Neutral (%)	Agree (%)
S11	Facebook is a good place to discuss different topics with classmates.	9	29	62	21	26	54
S16	Facebook is a good place to post writing assignments like short stories or essays.	4	39	57	22	23	56
S18	Facebook is a good place access links to resources provided by the teacher.	30	37	33	24	32	44
S20	Facebook is a good place to post and respond to surveys.	15	47	51	14	21	65
<i>Interpretative Communication</i>							
S13	Facebook is a good place to read articles and take notes to prepare for next class.	12	29	59	29	21	51
S14	Facebook is a good place to listen to audio files and take notes to prepare for next class.	22	33	45	25	26	49

S15	Facebook is a good place to peer review or peer edit classmates' writing assignments.	15	31	54	15	26	59
S19	Facebook is a good place to watch YouTube videos and discuss comprehension questions with classmates.	16	36	34	18	24	59
<i>Presentational Communication</i>							
S12	Facebook is a good place to make video posts as assignments.	20	31	49	29	25	46
S17	Facebook is a good place to have discussions with "guest speakers" like international students.	25	30	46	24	26	51

For the Interpersonal Communication statements, results show that participant attitudes were mostly positive toward specific activities or tasks at pre-test and positive throughout in the posttest. Although general attitudes decreased slightly for two of four corresponding items, favorable attitudes toward related activities were revealed nonetheless indicating that participants identified the value of most tasks and activities through Facebook, which supported Interpersonal Communication as a component of their language learning.

For the Interpretive Communication statements, results indicated that, like the responses related to Interpersonal Communication, participant attitudes were mixed at pre-test with either neutral or positive responses being reported, but at posttest all responses were positive. Regarding activities and tasks, participants reported some of the highest positive responses (59%) at posttest, especially where they were able to interact and communicate with each other as part of their learning experience. Specifically, participants enjoyed peer editing writing or discussing videos; all outside of the classroom and through Facebook's user platform.

For the Presentational Communication statements, as seen with the other factors, participant attitudes slightly declined at posttest, but overall participant attitudes were favorable both at pre- and posttest. Reported responses seem to demonstrate that participants largely viewed the activities or tasks beneficial for their learning and perceived Facebook as providing a realistic and advantageous platform for learning.

In order to present a better understanding of the attitudes and perceptions participants hold toward Facebook and language learning, qualitative data were collected, analyzed, and interpreted primarily to triangulate with quantitative data. The qualitative data from this study have been combined and themed through an inductive approach. The resultant themed categories, frequency of responses, and selected relevant comments are presented in Table 5.

Table 5

Categories, frequency of responses, and typical participant responses.

Inductive Categories	Frequency of Responses	Typical Participant Responses
Usefulness	33%	<p>One of the advantages of speaking by video is that I can practice many times.</p> <p>I have to think daily life in English, so I could know many words that use in daily life.</p> <p>I think advantage of using Facebook is we can check this wherever we were.</p> <p>I can communicate with classmates out of the class through Facebook.</p> <p>I can access it easily and I am easy to realize received email.</p>
Social Interaction	23%	<p>I liked this activity because I was able to know about the members of this class well.</p> <p>I had a lot of interest in Facebook, I want to connect more with my teacher and other students. I don't have so much of a chance to meet people from English speaking countries so it was a good chance.</p>
Difficulties	22%	<p>I could not sleep well when mails are sent in midnight.</p> <p>It was difficult to upload video.</p> <p>If students don't have smart phone or PC, they can't do this activity immediately.</p>
Enjoyment	16%	<p>I was happy to receive comments from my friends.</p> <p>I had a lot of interest in Facebook, I want to connect more with my teacher and other students.</p> <p>I enjoyed this activity. Because, I could know about my classmate's well.</p>

Other	4%	Facebook email and regular e-mail has similarity. So I think whichever is okay. Good to hear native English. Both speaking in front of the class and speaking by video are good to improve English skills.
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Responses to qualitative open-ended items disclosed that, in contrast to the quantitative data, the majority of participants largely favored Facebook as a possible educational tool for language learning. Positive responses outnumbered negative responses by three to one, contradicting the results from the quantitative data. Negative responses made were initially coded in several ways such as privacy concerns and safety concerns as well as practical hardware and software difficulties. The codes representing various problems, concerns, and negative reactions were combined to one category labeled difficulties. Typical responses made by participants concerning shared difficulties with using Facebook were *I had troubles many times when I upload videos and It is because that I can't trust Facebook's mail in security*.

The category with the most positive responses was categorized as *usefulness*. The largest benefit reported by participants for this category is captured by these participant comments: *In Facebook, we can think more deeply so we can make correct sentences in English* and *Using Facebook is easy way to check responses and to join other conversation*.

The category with the next largest number of positive responses, *Social interactions*, featured comments such as this representative one: *I like this activity because in daily life I can't ask question for exchange students in English*. The fourth major category of *Enjoyment* encompassed the various positive comments that expressed interest, enjoyment, and happiness in a direct way. These comments typically stated that using Facebook for a particular activity was *fun*, that they *enjoyed it*, or that it was *good*. The final category of *Other*, which had the fewest frequency of responses reported, contains individual comments that did not necessarily align with any of the final categories chosen. Typical responses expressed for this category either did not directly address the question being asked or they could not be classified as either being a positive or negative response.

In summary, based on the quantitative data at posttest, while there were both positive and negative changes in participant perceptions toward Facebook's potential in L2 education and language activities through Facebook, most changes were minimal. The largest changes in perceptions were in favor of Facebook's usefulness. Specifically, the majority of highest total number of positive responses in agreement were noted for the Ease of Use factor, while responses for Instructional Use revealed the greatest positive changes in participant attitudes overall. Additionally, the qualitative data tended to show more positive attitudes overall toward Facebook, even contradicting quantitative results in some instances.

Discussion

L2 Learners' Opinions toward the General Ease of Using Facebook in an Educational Context

With regard to the first research question, the present study indicates that participant beliefs towards the general ease of use of Facebook in education were overall positive and very positive in the case of the qualitative data. However, in some cases in the quantitative data, participant perceptions of Facebook actually diminished over the duration of the study.

Ease of use. The underlining rationale for using Facebook in education is that the SNS optimally affords students opportunities to collaborate and co-construct knowledge according to social constructivist principles. The asynchronous nature of social media learning environments are not bound to a specific location as with traditional classrooms, and support the principles of sociocultural theory. Of course, such reasoning relies on available technology and instructional procedures to be deemed easy to use. The qualitative data showed that participants were positive about using Facebook in general and the *Usefulness* category, with the highest percentage of responses, comprised many responses that expressed how easy Facebook was to use. However the quantitative data were not as positive as the qualitative data.

The decrease in participants' ratings with respect to the ease of access by mobile phone and finding school-related information through Facebook compared to a school-sponsored website were unexpected. Researchers conducting this investigation hypothesized that students would find Facebook easier for accessing information than school-sponsored websites, assuming students would receive instant updates on their mobile phones from Facebook's notification function whenever new information was added. This assumption was supported by the participants' own reflections as noted in qualitative data results, even though quantitative results appeared to contradictory. Many participant comments were similar to the following: *Facebook is a good way to convey information about class. All the members of my English class have a cellular phone and are connected to the Internet.*

However, although the researchers regularly made updates on homework and other class information to the wall within the class Facebook group, these posts may have been buried in the other traffic from participant posts, exposing a limitation of using Facebook as a course management system, as supported in the literature (Wang, Woo, Quek, Yang, & Mei, 2012). Another possibility is that the Facebook group focused more on class information than on university-wide information and students still had to access campus information elsewhere.

Educational use. Student responses to Statement 6 (contacting other students) and Statement 7 (contacting the teacher) were also contrary to the researchers' expectations. Participant perceptions of Facebook's usefulness in contacting classmates decreased in the posttest while simultaneously the agreement in perceptions increased toward contacting their instructor, essentially reversing their feelings about the two features. Such findings are especially important because the main social constructivist rationale of using Facebook for language learning is to provide a context where students can interact with each other for learning purposes.

In regard to lower posttest opinions of Facebook being a good place to contact classmates, one notable explanation readily comes to mind. Initially, to ease security

and privacy concerns, participants were encouraged by the researchers to create a separate Facebook profile for their educational use and many of them indicated that they had done so. Therefore, it could be assumed that students with new educational identities likely accessed them much less frequently than their regular accounts and consequently did not include many pictures, videos, or regular updates as they usually would. By not considering the social connectedness that students usually associate with Facebook, they may have lost interest in communicating further with each other beyond the activities themselves. In line with the social constructivist concept of the *community of learning*, it is suggested here that students must not merely be online, but must also create a learning community to reap the benefits of using social media in education.

Regarding participants' perceptions of Facebook being a good place to contact the teacher, the researchers regularly posted updates on Facebook and were available on Facebook to answer questions or give advice. Additionally, the instructors shared personal items like pictures of vacations and family members or in some cases participated in student activities. This willingness to connect with the participants is evidenced in student comments such as, *When I sent E-mail to my teacher, we were able to exchange our opinion each other. I was able to receive quick replies from my teacher so I thought that it was good way.* The noticeable difference in participant perceptions in pre- vs. post-test statements (S6 and S7) emphasize claims made by Mazer, Murphy, and Simonds (2007) that teacher self-disclosure, the amount of personal information made public, positively influences student participation and active learning. According to Mazer et al., Facebook provides both teachers and students with the opportunity to make interpersonal connections with each other. Therefore, teachers considering the use of Facebook should encourage students to use their regular Facebook profiles in order to build interest in fostering relationships beyond the classroom. In the absence of incorporating this key relational characteristic that Facebook affords, student motivation may be negatively impacted and learning outcomes consequently limited. Students may be apprehensive at first, but teachers can guide them through the privacy settings and demonstrate to them the role of Facebook's group platform. With the group platform, students can participate in all activities as group members without the obligation to be friends with their classmates, should they choose not to.

Instructional use. The largest increase in perceptions from the pre-test to post-test within this category was seen in Statement 8, using Facebook to check homework assignments. Japanese university students often have long commutes and other responsibilities in and out of the classroom and therefore appreciate being able to access class information at their convenience. A majority of participants reflected on these aspects of Facebook's usefulness and many responses can be summarized by one participant's observation:

It was convenient for me to check what I had to do in weekend and I was able to check what we did in that class. This activity helped me to plan what I did and I was able to prepare next classes. In that respect Facebook is good for me.

Such participant responses are consistent with previous research (Akbari et al., 2012; Bosch, 2009; Karimi & Khodabandeh, 2013; Madge, Meek, Wellens, & Hooley, 2009; Malone, 2007; Ophus & Abbott, 2009) where participants' perceptions

were mainly positive in regard to using Facebook to access materials related to their studies and improving learning outcomes. In this respect, the researchers postulate that the asynchronous nature of Facebook in which essential class components are not tied to time and place is one of its prime strengths and demonstrates Facebook's potential as a power educational tool, and one which educators should especially take advantage of for this instructional benefit.

L2 Learners' Attitudes toward the Usefulness of Facebook for Engaging in Specific Activities for Language Learning

Regarding the second research question, the results suggested that participants' attitudes toward most statement items relating to specific activities through Facebook were largely positive both prior to and after completing the study. Again the qualitative data showed a strong favorable perception of using Facebook for specific activities, which was mostly reflected in the two categories *Usefulness* and *Making Connections*. However, there are several activities or tasks that show clear changes in attitudes, both optimistically and pessimistically in the quantitative data that are relevant and merit discussion in more detail.

Interpersonal statements. Attitudes toward Statement 11, discussing topics with classmates, decreased upon posttest, which is in contrast to a number of other studies (Arendt, Matic, & Zhu, 2012; Omar, Embi, & Yunus, 2012; Suthiwartnarueput & Wasanasomsithi, 2012) where students enjoyed conversing on Facebook rather than in a traditional classroom setting. It could be inferred that higher positive attitudes in the pretest were based on experiences communicating socially with friends on Facebook and that discussing topics in an academic setting did not meet the participants' prior expectations. However, many topics discussed were similar to the ones the participants might typically discuss socially, for example, favorite places to eat, hobbies, or recent movies they have seen. Perhaps the participants felt that longer discussions were troublesome because postings in Facebook are structured chronologically, which makes tracking and participating in long discussions cumbersome. This assumption is supported by qualitative comments made by the participants themselves highlighted here: *I could enjoy this practice. Because I could communicate with many classmates and I could know their hobbies, circle, memories and so on, but when classmates make posts to me, I felt tired to comment to all.*

This follows similar results by DeSchryver, Mishra, Koehler, and Francis (2009) and Wang et al. (2012), who reported that participants felt discussions were *unnatural* and they did not like having them. Therefore, it is recommended that clear instructions be made apparent to students prior to beginning any activity. This postulation is supported by Kaliban et al., (2010) who stated that in order for students to see the learning value of participating in discussion activities through Facebook, teachers need to clearly inform them of the objectives and intended learning outcomes of each activity and deemphasize instructions on how to use Facebook to complete the tasks.

Interpretive Communication statements. Regarding Statement 14, listening to audio files and taking notes, attitudes only slightly increased in the posttest, which the researchers found surprising since the largest change in participant attitudes was seen in Statement 19, watching YouTube videos through Facebook and answer-

ing questions. Both of these activities are similar in that they are equally accessible through Facebook and both include a listening and writing component. Qualitative responses suggest that participants perceive these two activities differently because they appear to prefer the visual component of videos when learning: *Accessing files through Facebook is very easy and I can do both, and I like to see the video many times, but I tired to listen only.*

As supported by participant comments, the researchers suggest that the difference in attitudes reported between Statements 14 and 19 is not based on student perception of any limitation of Facebook's usefulness. Therefore, based on the noticeable change in positive attitudes, as particularly noted with Statement 19, the researchers believe it would be advantageous for educators considering the use of Facebook to conduct various listening activities by utilizing videos, such as YouTube, more often than audio files.

Presentational Communication statements. Regarding the final two statement items, results indicate only slight changes in participant attitudes. However, the attitudes expressed by the participants toward Statement 12, making video assignments, are of particular interest. The results indicate that attitudes at the pre-test were only moderately positive and in fact decreased at the posttest as participants indicated they were less convinced of the activity's usefulness. However, qualitative comments suggest otherwise as participant attitudes were extremely positive toward this activity for improving their language accuracy. A number of participants expressed positive attitudes toward Facebook's usefulness as a platform for posting video assignments and a number of popular responses reported are highlighted in the following comment: *Before I post video, I practice many times. And after post video, I could check my video. Thanks to it, I could notice whether my pronunciation was poor.*

Participant attitudes seem to show that they were more concerned about the quality of their work and took a more active role in their learning when participating in this type of activity through Facebook. Here one notes students' extra engagement with their *learning community*. Although the main task is actually an individual activity, students take a keen interest in their performance due to the participation of a peer group in a secondary aspect of the overall activity. By identifying their own mistakes and weaknesses, and repeatedly practicing until they were satisfied with what they produced, not only did participants demonstrate an increased investment in their learning (Blattner & Fiori, 2009; Harwood & Blackstone, 2012; Kabilan, Ahmad, & Abidin, 2010; Li & Pitts, 2009; Mills, 2009; Shih 2011; Wang & Vasquez, 2012; Yunus & Salehi, 2012), they also took responsibility for their own learning, which is considered an important element of learner autonomy (Littlewood, 1999). Additionally, the collaborative learning process in which the participants engaged coincides well with social constructivist theories on education that focus on learning as an active and social activity.

Conclusions

In line with social constructivist theory, the primary benefits of Facebook as a powerful learning tool include affordance of opportunities for students to collaborate and share knowledge (Bosch, 2009; Maloney, 2007; McCarthy, 2012) and its capacity to promote, "greater interactive learning opportunities through genuine

communication and social interaction in the target language" (Wang & Vasquez, 2012, p. 416). The opinions voiced and attitudes expressed by the participants of this study regarding the use of Facebook in L2 education were generally positive overall, but the findings need to be replicated in other environments in order to confirm more definitive results. Nevertheless, for educators considering the use of Facebook in a L2 classroom setting, several notable suggestions emanate from this study.

First, it is recommended to keep an open mind about Facebook's educational value as students overall demonstrated positive attitudes toward its usefulness. Specifically in this research, students specified essential class materials not being tied to time and place as one of the prime strengths of Facebook's educational potential. Second, this study showed that when activities are conducted within a learning community composed of peers, learners took an active role and exhibited more self-determination to improve their weakness until they were personally satisfied. Third, based on this study, the researchers believe that Facebook's platform, although not without its limitations, is capable of providing students with a multitude of activities that can be adapted and tailored for students' learning needs whether they be listening, speaking, reading, or writing tasks. Our conclusion is supported by several other researchers who collectively infer that when activities through Facebook are engaging and students can collaborate and reflect on their own learning, then motivation, confidence, and attitudes will improve (Kalibab et al. 2010; Mazer, Murphy, & Simonds, 2007; Shih, 2011; Yunus & Salehi, 2012). Finally, Hardwood and Blackstone (2012) summarize findings from this study as well as other similar studies. Accordingly, they reaffirm Facebook's potential role in promoting L2 teaching and learning, by claiming that because of its popularity and prevalence in students' lives, educators need to consider Facebook as a learning tool that creates a greater community of learners, offers students another avenue for individual knowledge development, and links formal and informal learning.

The researchers acknowledge the limitations of this preliminary study and have identified several points of interest for improvement in future studies. First, both the quantitative and qualitative questionnaires utilized in this study were original in concept and were not adopted from another study. Although great effort was undertaken by both researchers to develop a comprehensible and reliable questionnaire, the researchers combined several statements with similar ideas into one whereas each item should have been presented separately on its own in order to gather more accurate participant responses.

Additionally, this study was conducted in the second semester of the participants' first year in university and therefore, due to time constraints, was only conducted over a two-and-a-half month period. Ideally, future studies should be more longitudinal, perhaps over the course of a year as more. Varied changes in participant attitudes would be more likely observed and valid responses achieved, if participants have a longer time to form objective opinions on the probability of activities through Facebook to improve language learning. Finally, this study was conducted on just fewer than 100 Japanese students, and therefore it is hoped other researchers will independently replicate this study in the near future in similar East Asian L2 contexts, perhaps on a much larger scale, and that further analyses, especially on qualitative data, be thoroughly investigated in order to better validate the findings reported here.

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Appendix A

Facebook Questionnaire

Section 1. My Perceptions of using Facebook

Please choose the answer that best reflects your view for each item. Answer each item as truthfully as possible using the following rating scale.

Strongly Disagree	Neutral			Strongly Agree		
1	2	3	4	5	6	7

1. Facebook can be used both socially and for educational purposes.
2. Facebook is safe to use both socially and for educational purposes.
3. Facebook is easier to access from my mobile phone than my own university's website.
4. Facebook is easier to find school-related information than my own university website.
5. It's easy to make posts, upload pictures and videos on Facebook.
6. Facebook is a good place to keep in contact with other students from class.

7. Facebook is a good place to contact my teacher outside of class.
8. Facebook is a good place to check class notes or homework assignments posted by the teacher.
9. Facebook is a good place to ask for help about homework assignments.
10. Facebook is a good place to check for school related updates and notices.

Section 2. My Perceptions of Activities on Facebook

This next set of questions asks for your opinion on activities that could be done through Facebook. Please choose the answer that best reflects your view for each item. Answer each item as truthfully as possible using the rating scale from above.

11. Facebook is a good place to discuss different topics with classmates.
12. Facebook is a good place to make video posts as assignments.
13. Facebook is a good place to read articles and take notes to prepare for next class.
14. Facebook is a good place to listen to audio files and take notes to prepare for next class.
15. Facebook is a good place to access links to resources provided by the teacher.
16. Facebook is a good place to have discussions with “guest speakers” like international students.
17. Facebook is a good place to post writing assignments like short stories or essays.
18. Facebook is a good place to peer review or peer edit classmates’ writing assignments
19. Facebook is a good place to watch Youtube videos and discuss comprehension questions with classmates.
20. Facebook is a good place to post and respond to surveys.

Section 3. Personal Information

21. Gender: 1. Female 2. Male
22. Year level: 1. 1st 2. 2nd 3. 3rd 4. 4th
23. University Type: 1. Private 2. Public
24. I have been using Facebook for: 1. 0-2 years 2. 3-5 years 3. 6-8 years
25. How often, on average, do you access Facebook per week?
 - A. 1-3 x a week
 - B. 4-6 x a week
 - C. 7 or more x a week
26. How often, on average, do you access Facebook per day?
 - A. 1-3 x a day
 - B. 4-6 x a day
 - C. 7 or more x a day